ABSTRACT OF THE DISCLOSURE

A Fast Fourier Transforming apparatus and method thereof for compensating for an OFDM output bit signal is described. The apparatus includes an input buffer unit for storing and outputting a received OFDM bit signal and a butterfly operation unit for performing a butterfly operation according to a radix algorithm. The apparatus comprises a scale detection unit for calculating and outputting a scale factor which is a division factor used for controlling a bit value of a butterfly operated signal input from the butterfly operation unit at each of the stages to a predetermined bit limit of the received OFDM signal, a scale count unit for cumulative counting a count figures corresponding to the scale factor input from the scale detection unit and outputting the result, and a compensation unit for controlling the bit of a signal input from the butterfly operation unit according to result values from the scale detection unit and the scale count unit and outputting the result.